



UNDESCRIBED SPECIES OF SOUTH AMERICAN
TIPULIDÆ (Diptera), PART II

By

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I am pleased to prepare the accompanying paper to appear in the memorial volume to the first great Chilean Naturalist, Juan Ignacio Molina. In an earlier paper (*Revista Chilena Hist. Nat.* **33**: 164-165, pl. 51 fig. 1; 1929) it gave me great satisfaction to dedicate one of the included species to Molina under the name *Gnophomyia* (*Gnophomyia*) *molinæ* Alexander.

In the present report I am discussing four new species of the genus *Hexatoma* Latreille from Perú, collected by my friends Mr. Pedro Paprzycki and Mr. Félix Woytkowski. The types of these flies are preserved in my vast collection of the World Tipulidae.

Hexatoma (Eriocera) perexigua, n. sp.

Belongs to the *macrocera* group; general coloration pale brownish yellow, the praescutum with faintly indicated darker stripes; head pale brown, sparsely pruinose; vertical tubercle (female) notched at summit; thoracic pleura dark brown above, paler ventrally; legs yellow; wings with a weak brown tinge, stigma and costal border slightly darker; R 1+2 very short; abdomen brownish yellow, the incisures narrowly dark brown.

Female.—Length, about 6—7 mm.; wing, 7—8 mm.

Rostrum pale brown; palpi black. Antennae pale yellowish brown to pale brown, the outer flagellar segments a little darker. Head pale brown, the surface sparsely pruinose; vertical tubercle relatively conspicuous for the female sex, deeply notched at summit.

Mesonotum pale brownish yellow, with scarcely indicated darker brown stripes; scutum medium brown; scutellum brown, weakly pruinose; postnotum brown. Pleura dorsally relatively dark brown, the ventral sclerites somewhat brightened. Halteres with stem pale, knob blackened. Legs with coxae obscure brownish yellow; trochanters yellow; remainder of legs, including tarsi, obscure yellow. Wings with a weak brown tinge; cell C pale brown, Sc more yellowish; stigma slightly darker brown; a scarcely evident dark seam at cord, best indicated by a darkening of the veins. Sparse trichia along distal section of vein R_5 . Venation: R_1+2 very short, less than R_2 , the latter about one-half R_2+3 ; R_s long, strongly arcuated to angulated at origin; *m-cu* at fork of *M*.

Abdomen brownish yellow, the incisures narrowly dark brown. Ovipositor with elongate sclerotized valves.

Habitat.—Perú (Huanuco).

Holotype, female, Pumahuasi, altitude 980 metres, July 25, 1939 (*Woytkowski*). Paratopotypes, 4 females, July 25—26, 1939.

Although only the female sex is available to me at this time, I have no doubt but that the present fly belongs to the *macrocera* group, with greatly lengthened antennae in the male sex. Among the described Neotropical species of the group, *Hexatoma (Eriocera) antennata* (Alexander) of Colombia; *H. (E.) macrocera* (Alexander) of eastern Brazil; *H. (E.) stolidata* Alexander of northern Panama; and *H. (E.) substolidata* Alexander of southern Mexico, the present fly is closest to the last-named species. This is still known only from the male sex whereas the present fly is represented only by

females. The details of coloration of the two flies, especially of the antennae, thorax and legs, are distinctive. *H. (E.) stolidus*, which has the abdomen similarly banded, differs in the coloration of the antennae, head and legs.

***Hexatoma (Eriocera) atrosignata*, n. sp.**

General coloration obscure brownish yellow, the praescutum with three brown stripes; a black spot at cephalic end of each lateral praescutal stripe; halteres with stem yellow, knob blackened; femora yellow, the tips blackened; tibiae brownish yellow, the extreme base and slightly wider tip blackened; tarsi black; wings weakly tinged with brown, patterned with extensive cream-yellow areas at wing base and before cord; macrotrichia of veins beyond cord very sparse or lacking; Sc_1 much longer than Sc_2 ; abdomen yellow, the first tergite and fifth and sixth segments blackened.

Female.— Length, about 19 mm.; wing, 14.3 mm.; antenna, about 3.8 mm.

Rostrum pale brown; palpi brownish black. Antennae (female) 11—segmented; basal four segments yellow, the outer segments black; scape narrowly infuscated on dorsal face; flagellar segments gradually decreasing in length outwardly. Head light orange-yellow, the genae more brownish pruinose; vertical tubercle with a linear median split in front, the dorsal surface of each half elevated into a paler tubercle or blister.

Mesonotal praescutum obscure brownish yellow, with three brown stripes, the median one vaguely divided on cephalic portion by a pruinose line; immediately before the cephalic end of each lateral stripe a conspicuous velvety black spot; scutum obscure yellow, the lobes variegated with brown, becoming still darker near lateral ends of suture; scutellum and postnotum obscure brownish yellow, sparsely pollinose. Pleura obscure yellow, pollinose. Halteres with stem yellow, knob blackened. Legs with coxae and trochanters obscure yellow; femora yellow, the tips rather narrowly but conspicuously blackened, the amount subequal on all legs; tibiae brownish yellow, the bases narrowly, the tips more broadly blackened; tarsi black. Wings with a weak brown tinge, variegated with cream yellow areas, the latter appearing chiefly as extensive bands at wing-base and before cord; stigma and seams along cord weakly darker than the ground; veins brown, paler at wing-base and including all but distal end of vein *2nd A*. Macrotrichia of veins beyond cord very sparse or lacking, except for a scattered series on R_5 . Venation: Sc_1 ending about

opposite midlength of R_2+3+4 , Sc_2 some distance from its tip, about opposite $r-m$; R_2 a trifle longer than R_2+3 ; R_1+2 about one-fourth R_2+3+4 ; $m-cu$ more than one-half its length beyond fork of M .

Abdomen with basal tergite pale brown, bordered posteriorly with black; succeeding tergites light yellow, the fifth and sixth segments black, their basal rings paler; outer segments and genital shield orange; sternites yellow, the subterminal segments weakly darkened.

Habitat.—Perú (Huanuco).

Holotype, female, Pumahuasi, altitude 980 metres, July 22, 1939 (*Woytkowski*).

Hexatoma (Eriocera) atrosignata somewhat resembles.

H. (E). propinqua Alexander, of southeastern Brazil differing conspicuously in the details of coloration, as the conspicuous black spots on the praescutum. From the species allied to *H. (E). obausiana* (Enderlein), it differs in the coloration and in the venation, especially the relative position and strength of veins Sc_1 and Sc_2 .

***Hexatoma (Eriocera) subsaga*, n. sp.**

Size large (wing over 11 mm.); general coloration of thorax gray pruinose, the praescutum with three conspicuous black stripes; first flagellar segment more or less yellow, the remainder darkened; vertex orange; halteres and legs black, the femoral bases narrowly brightened; wings whitish subhyaline, weakly patterned with brown; abdomen elongate, black; bases of segments three to five ringed with yellow; hypopygium and genital shield of female orange.

Male.—Length, about 17–18 mm.; wing, 11.5–12 mm.

Female.—Length, about 18–19 mm.; wing 13–13.5 mm.

Rostrum dark brown; palpi black. Antennae short, black; 7-segmented in male, 11-segmented in female; scape paler on ventral face; first flagellar segment yellow basally in male, uniformly yellow in female; flagellar segments beyond the first gradually decreasing in length. Head above orange, darkened posteriorly; vertical tubercle moderately high, weakly notched.

Pronotum light gray pruinose. Mesonotal praescutum with the ground color gray, with three very conspicuous black stripes that restrict the interspaces; lateral stripes confluent with a blackened lateral area opposite their anterior ends and thus appearing to reach the praescutal margin behind the pseu-

dosutural foveae; scutum gray, the lobes darker gray; scutellum and postnotum light gray. Pleura black, heavily gray pruinose. Halteres black throughout. Legs with coxae gray pruinose; trochanters black; femora black, narrowly brightened basally, most conspicuously so on the fore pair where the bases are narrowly yellow; tibiae and tarsi black. Wings with the ground color whitish subhyaline or with a weak brown tinge; wing tip and seams at cord outer end of cell 1st M_2 narrowly infumated; costal border, especially cell Sc , darkened; veins dark brown. Veins beyond cord, with the exception of R_5 , without trichia. Venation: R_s long, exceeding twice R_2+3+4 ; R_2 subequal to R_2+3 ; R_1+2 relatively short, approximately one-third to one-fourth R_2+3+4 ; cell 1st M_2 subequal in length to vein M_3 beyond it; $m-cu$ about one-third its length beyond fork of M .

Abdomen elongate in both sexes but especially in male; tergites black, the bases of segments two to five inclusive, more or less yellow, more conspicuously so in female; subterminal segments uniformly black; sternites in male as described but the yellow bases much wider and more conspicuous, involving more than one-half the segment; in female, basal sternites uniformly yellow; male hypopygium and genital shield of female orange; valves of ovipositor darkened.

Habitat.—Perú (Junín, Huanuco).

Holotype, male, Satipo, Junín, altitude 800—900 meters, December 31, 1939. (*Paprzycki*). Allotopotype, female, December 30, 1939. Paratopotypes, 2 males, December 19—30, 1939; paratype, 1 female, Pumahuasi Huanuco, altitude 980 metres, July 26, 1939 (*Woytkowski*).

Hexatoma (Eriocera) subsaga is most similar to *H. (E.) saga* Alexander, of Venezuela, differing in the larger size, details of venation, and the coloration, especially of the abdomen and male hypopygium.

***Hexatoma (Eriocera) trialbosignata*, n. sp.**

General coloration black; vertex of head obscure orange; antennae with scape brownish orange, the remainder black; halteres and legs black; wings strongly suffused with blackish, before cord with three conspicuous white areas occupying parts of cells R_1 , R and M , respectively.

Male.—Length, about 8 mm.; wing, 8.5 mm.; antenna, about 1.5 mm.

Female.—Length, about 16 mm.; wing, 13 mm.; antenna, about, 3 mm.

Rostrum and palpi black. Antennae of male 7—segmented,

of female 9—segmented; scape obscure brownish orange, pedicel and flagellum black; flagellar segments cylindrical, gradually decreasing in length outwardly. Head with anterior vertex obscure orange, the posterior portions darkened; vertical tubercle evenly rounded.

Thorax black throughout, surface subnitidous; praescutal vestiture sparse. Halteres black. Legs black throughout. Wings with the ground color black, the anal cells paler; three conspicuous white areas before cord, occupying cells R_1 , R and M , respectively, separated from one another by broad seams of the ground color along veins R_s and M ; veins dark brown. Outer radial veins with macrotrichia, these lacking on outer medial branches. Venation: R_1+2 relatively short, subequal to R_2+3 ; R_2 a little more than one-half R_1+2 or R_2+3 ; R_s arcuated; $m-cu$ from one-third to more than one-half its length beyond the fork of M ; cell M_1 lacking; cell 1st M_2 subequal in length to vein M_3 beyond it.

Abdomen black, opaque, the incisures of the segments more polished; genital shield black; ovipositor with valves paling to horn-yellow beyond their bases; male hypopygium black.

Habitat.—Perú (Huanuco).

Holotype, male, Pumahuasi, altitude 980 metres, July 23, 1939 (*Woytkowski*). Allotopotype, female July 19, 1939.

Hexatoma (Eriocera) trialbosignata is entirely different from the other species of the subgenus so far described from Tropical America. Within this faunal area there are numerous species that have a more or less extensive pale crossband at near midlength of the wing but none of the described forms has this broken by broad seams to the traversing veins, as is the case in the present fly. The small size of the male, in comparison with the female, is somewhat noteworthy.

